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# भारत का राजपत्र

## The Gazette of India

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PUBLISHED BY AUTHORITY

सं. ४]

नई दिल्ली, शनिवार, जनवरी २८, १९८४ (माघ ८, १९०५)

No. ४]

NEW DELHI, SATURDAY, JANUARY 28, 1984 (MAGHA 8, 1905)

इस भाग में चिन्ह पृष्ठ संख्या दी जाती है, जिससे कि पहला अलग संकलन के रूप में रखा जा सके।

(Separate paging is given to this Part in order that it may be filed as a separate compilation)

### भाग III—खण्ड २ [PART III—SECTION 2]

#### पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बंधित अधिसूचनाएं और नोटिस (Notifications and Notices issued by the Patent Office relating to Patents and Designs)

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Calcutta, the 28th January 1984

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437 GI/83

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- (9) Mrs. Anuradha Salhotra,  
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New Delhi-110017.
- (10) Shri Biswanath Ghosh,  
Vill. Pock-Pari, P.O. & P.S. Budge-Budge,  
24-Parganas, West Bengal.
- (11) Shri Debasis Datta,  
4-A, "JAY-JAYANTI",  
2, Mandeville Gardens,  
Calcutta-700019.

#### CORRIGENDA

In the Gazette of India, Part III Section 2 dated the 7th May, 1983 under the heading "Complete specification accepted"—

In page 300, Column 2 against Patent application No. 151491, delete "And" after "Bhagwatisharan Malviya" in the entry "Applicant and Inventor" and the said entry should read as—

"Bhagwati Sharan Malviya C/o S. R. Joshi, 773/2, Shivaji Nagar, Pune-411 004, Maharashtra, India."

In page 300, Column 2 under the heading "6 Claims"— in the 8th line—

for "Elerting lever"  
read "altering lever".

#### APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE, 214, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-700017

22nd December, 1983

1567/Cal/83. Societe Chimique Des Charbonnages S.A. Further improved continuous process for the manufacture of homopolymers or copolymers of ethylene.

1568/Cal/83. Institut Francais Du Petrole. Device for transmitting signals by radio and cable between a central control and recording system and data acquisition device.

1569/Cal/83. Universal Technic. Electric current measuring tongs with magnetic circuit and pivoting arm.

1570/Cal/83. University of Auckland. Improvements in or relating to a method of governing a generator and/or apparatus for governing a generator. (22nd December, 1982).

1571/Cal/83. Copeland Corporation. Scroll-type machine.

1572/Cal/83. North American Car Corporation. Railway hopper car.

1573/Cal/83. Siemens Aktiengesellschaft. Pressurisable container having a safety device for releasing inadmissible container pressure.

1574/Cal/83. Miron Tuval and Andre Wexler. Modular roadway construction method and prefabricated units therefor.

1575/Cal/83. Miron Tuval and Andre Wexler. Peripherally stressed composite structural units.

23rd December, 1983

1576/Cal/83. Shantanu Mukherjee. Fluid based structural engineering design suitable for designing bridges, flyovers, wide span roofs of buildings, factories, stadia etc. and other possible areas of structural and civil engineering construction.

1577/Cal/83. Textilno Machinostroenie. An apparatus for yarn winding.

1578/Cal/83. Linde Aktiengesellschaft. Non-precipitating regulation of ammonia content in sour gas solvent scrubbing system.

1579/Cal/83. Tampax Limited. Tampon applicator. (23rd December, 1982).

1580/Cal/83. B & W Diesel A/S. Hydraulic actuating mechanism for a gas exchange valve of an internal combustion engine.

1581/Cal/83. Kerb-Konus-Vertriebs-GmbH. Self-cutting threading insert.

24th December, 1983

1582/Cal/83. Monohar Lal Gulati. Device to dry garments.

1583/Cal/83. Pont-A-Mousson S.A. Method and apparatus for arranging catiron pipes in odd number stacks.

1584/Cal/83. Gould Inc. Method of treating thermoplastic surfaces.

1585/Cal/83. The Lubrizon Corporation. An improved lubricating oil having additive compositions or concentrate comprising sulfurized alkyl phenol and high molecular weight dispersant.

26th December, 1983

1586/Cal/83. Shri Dharendra Nath Sen Gupta. Design and construction of a semi automatic built-in-applicator for simultaneous treatment of both the sides of a light flexible strip.

1587/Cal/83. Regents of the University of Minnesota. Switch mechanism.

1588/Cal/83. Union Carbide Corporation. Novel organo-functional silanes containing hindered group.

27th December, 1983

1589/Cal/83. Stauffer Chemical Company. Stannic N-Phosphono-methylglycine and its use as a herbicide.

1590/Cal/83. Institut Francais Du Petrole. Method and apparatus for detecting fractures by ultrasonic echography along the wall of a material or a formation.

1591/Cal/83. Union Carbide Corporation. Novel silyl carbamates and synthesis thereof.

1592/Cal/83. Union Sugar Company. Improved method of recovering sucrose.

1593/Cal/83. Volta-Werke Elektricitats-GmbH. Method and apparatus for casting around metal bodies.

1594/Cal/83. H.R. Textron Inc. General purpose hydraulic test station.

28th December, 1983

1595/Cal/83. M.A.N. Maschinenfabrik Augsburg-Nürnberg Aktiengesellschaft. Procedure for operation of a reactor for production of synthesis gas and equipment of implementation of the process. (6th September, 1983).

1596/Cal/83. Maschinenfabrik Rieter AG. False twist unit.

1597/Cal/83. Maschinenfabrik Rieter, AG. Device for laying bobbins on a transportband.

1598/Cal/83. Indian Jute Industries' Research Association. Flexible bulk pack containers from jute fabrics.

APPLICATION FOR PATENTS FILED AT THE PATENT OFFICE BRANCH MUNICIPAL MARKET BUILDING, IIIRD FLOOR, KAROL BAGH, NEW DELHI-110005.

14th November, 1983

756/Del/83. Bal Krishna Saraf, "Vajrakanti Chemicals (Diamond de-colourisation chemical)".

757/Del/83. Societe Anonyme D.B.A. "Disc brake with automatic adjustment".

758/Del/83. Thomson-Brandt, "Support of geostationary satellite telecommunications antenna and assembly formed by such a support and its antenna".

759/Del/83. Ruhrkohle Aktiengesellschaft, "Coke oven doors for horizontal-chamber coke ovens".

15th November, 1983

760/Del/83. Bharat Heavy Electricals Limited, "The polybenzimidazole resin impregnated 275 class micaeuous insulations".

761/Del/83. The Gillette Company, "Razor blades". (November 19, 1982).

762/Del/83. El Paso Polyolefins Company, "High clarity propylene polymer compositions of improved impact strength".

763/Del/83. El Paso Polyolefins Company, "Heat sterilizable polyolefin compositions and articles manufactured therefrom".

764/Del/83. Blue Circle Industries PLC, "Coated particulate filters". (November 24, 1982).

16th November, 1983

765/Del/83. JHW Engineering Limited, "Seat reclining mechanism".

766/Del/83. The British Petroleum Company P.L.C., "Process for the transalkylation or dealkylation of alkyl aromatic hydrocarbons". (November 18, 1982).

17th November, 1983

767/Del/83. BGB-Gesellschaft Reinmar John, Rainer-Léo Meyer and Olga Meyer, geb. Klopfer, "One-component coating composition and method of producing a protective coating on a base therewith".

18th November, 1983

768/Del/83. The Secretary of State for Defence in Her Britannic Majesty's Government of the United Kingdom of Great Britain and Northern Ireland, "Welding method and apparatus". (November 30, 1983).

21st November, 1983

769/Del/83. Suraj Prakash Seth, "Lifting water from underground by using the Animal power title animal power driven water lifting pump".

770/Del/83. Scharringsrausen Maschinenbau Gesellschaft Mit Beschränkter Haftung, "Apparatus for cutting metallic sheets and the like".

771/Del/83. Budapesti Radiotechnikai Gyár, "A filter arrangement with active elements".

22nd November, 1983

772/Del/83. Narendra Kumar Goel and Chandra Prakash Gupta, "A direct current self excited motor immunised or protected against alternating currents".

773/Del/83. Sanjay Maniktala, "Voltage Protection System".

774/Del/83. Paul Wurth S.A. "Cooling device for charging installation for shaft furnace".

775/Del/83. Kerr-McGee Chemical Corporation, "Process for producing titanium tetrachloride".

776/Del/83. Exxon Research and Engineering Co. "Single stage reforming of high hydrogen content feeds for production of ammonia syn gas".

777/Del/83. Ivan Vasilievich Mokhov, "Hopper gate".

778/Del/83. Byung D. Yim, "Propulsion and speed change mechanism for lever propelled bicycles".

24th November, 1983

779/Del/83. Captain Gursharan Singh, "A technique to draw Electrical Energy from Water or Air or anything by bringing down its temperature".

780/Del/83. Bharat Heavy Electricals Limited, "Compound hydromechanical torque converter".

781/Del/83. Ivan Vasilievich Mokhov, "Container gate".

782/Del/83. Ambreesh Kumar, "Domestic weighing machine".

25th November, 1983

783/Del/83. Abhimanyu Tambar, "A biofeed back device which monitor galvanic skin resistance".

26th November, 1983

784/Del/83. Bharat Heavy Electrical Limited, "Fluidized bed-particle distributor plate".

785/Del/83. Dr. Satya Nand & Virendra Kumar Jain, "Electro-magnetic stimulator for fracture healing".

786/Del/83. Dr. Satyanand & Virendra Kumar Jain, "Electrical stimulator for fracture healing and treatment of bone infections".

787/Del/83. Dr. Satyanand & Virendra Kumar Jain, "Electrical bone growth stimulator for fracture healing".

28th November, 1983

788/Del/83. Council of Scientific and Industrial Research, "A process for recovery of cobalt, nickel and copper from copper converter slag with ammonium sulphate roasting at low temperatures".

789/Del/83. John Derek Guest, "Tube Couplings" (December 13, 1982).

790/Del/83. Babcock Power Limited, "Improvements Relating to estimating Combustion Chamber Temperatures" (November 29, 1982).

791/Del/83. Albright & Wilson Limited, "Non-Evaporative Solidification of Detergent pastes" (December 7, 1982).

29th November, 1983

792/Del/83. Piyare Lal Gupta, "Improved water supply Regulator".

793/Del/83. Council of Scientific and Industrial Research, "A process for extraction of copper, nickel and cobalt from manganese deep sea nodules of Indian Ocean Origin using dilute sulphuric acid in presence of solid reductant at atmospheric pressure.

794/Del/83. Council of Scientific and Industrial Research "An Improved process for the preparation of aluminium or aluminium alloys.

795/Del/83. Council of Scientific and industrial Research "A process for recovering copper, nickel and cobalt values from Indian ocean Managnese nodules using solid reductant in Ammonia-ammonium chloride system.

796/Del/83. La Telemecanique Electrique, "A Thyristor structure with intrinsic switch-on and application thereof to the construction of a bidirectional device".

797/Del/83. La telemecanique electrique, "A control circuit for a sensitive semiconductor device of the thyristor or triac type, with self switch-on assistance impedance".

798/Del/83. Imphy S.A., "Powdered material useful for producing hydraulic binders and means for manufacturing it."

29th November, 1983

799/Del/83. Imperial Chemical Industries PLC, "Catalytic Process and Catalysts" (December 13, 1982, August 4, 1983, December 13, 1982, August 4, 1983, December 13, 1982).

30th November 1983

800/Del/83. Exxon Research & Engineering Company "Production of ammonia syn gas by single-stage reforming of high hydrogen content feeds".

801/Del/83. Energy conversion Devices, "Apparatus for and method of depositing a highly conductive, highly transmissive film".

802/Del/83. Hoesch Werke Aktiengesellschaft, "Rail fastening with an adjustable rail Baseplate".

803/Del/83. Messerchmitt-Bolkow-Blohm GmbH, "Trajectory Acquisition and monitoring system".

1st December, 1983

804/Del/83. Council of Scientific and Industrial Research, "Preparation of high purity boric acid by electrolytic method using ion-exchange membranes as diaphragms".

805/Del/83. Council of Scientific and Industrial Research, "A process for the synthesis of phenoxymethyl-1-(4-(O-Methoxy-Phenyl)-Piperazino Carbonyl) Cyclopropanes".

806/Del/83. Cement Research Institute of India "A bag packaging of Granular and powdery materials".

807/Del/83. Cement Research Institute of India, "A Precal-cining Reactor".

808/Del/83. Cement Research Institute of India, "A Precal-cining Reactor."

809/Del/83. Cement Research Institute of India "A Precal-cining Reactor".

810/Del/83. Cement Research Institute of India, "A Precal-cining Reactor".

2nd December, 1983

811/Del/83. USS Engineers and Consultants, "Method of determining Iron, pyrite or Ash contents of coal".

812/Del/83. Chemische Fabrik Stockhausen GMBH, and Saarbergwerke Ag, "Process for separating mineral ultra-fine grain from washings obtained in coal processing or from coal slurries.

3rd December, 1983

813/Del/83. Piyae Lal Gupta, "Improved drain pipe cover"

814/Del/83. Britax (Wingard) Limited, "Rear view Mirror Assembly" (December 23, 1982).

815/Del/83. Ernest Heaney Worth, "Method of making Patterned Multi-Laminar Article" (December 4, 1982).

5th December, 1983

816/Del/83. John Derek Guest, "Tube couplings (December 13, 1982).

817/Del/83. Klockner-Humboldt-Deutz Aktiengesellschaft, "A Centrifugal pump".

818/Del/83. Uniroyal, Inc., "Catalyst for alpha-olefin polymerization".

819/Del/83. Uniroyal, Inc. "Catalyst activator for alpha olefin polymerization".

820/Del/83. Dewan Kraft Systems Pvt. Ltd., "A flotation device for removal of impurities form a slurry".

6th December, 1983

821/Del/83. Telefonaktiebolaget L M Ericsson, "Activation of a transmission link by code sending".

822/Del/83. Dornier GMBH, "Aerodynamic lateral flow body, in particular airfoil".

823/Del/83. Telefonaktiebolaget L M Ericsson, "Activation in a digital subscriber connection".

824/Del/83. Henri Vidal, "Bridge Abutment". (December 6, 1982).

825/Del/83. Dynachem Corporation, "Automatic laminator".

826/Del/83. Jagmohan Singh Bindra, "Inclined plane spinning machine for natural or synthetic textile fibres".

7th December, 1983

827/Del/83. Voest-Alpine Aktiengesellschaft and Korf Engineering GmbH, "A method and a melt-down gasifier for producing molten pig iron or steel pre-products".

828/Del/83. Compagnie Industrielle Des Telecommunications Cit-Alcatel, "A system for processing channel signalling in a time division digital exchange".

8th December, 1983

829/Del/83. Paul Wurth S.A., "Apparatus for guiding and changing immersion lances".

830/Del/83. Michel Deal, "Variable ratio transmission" (December 14, 1982).

9th December, 1983

831/Del/83. Council of Scientific and Industrial Research, "Process for the synthesis of N-substituted-2-aminomethylacrylo-phenones".

## ALTERATION OF DATE

152482 (903/Del/84). Ante dated to 17th December, 1980.

152482 (903/Del/80). Ante dated to 17th December, 1980.

152483 (904/Del/80). Ante dated to 27th June, 1979.

152483 (904/Del/80). Post dated to 27th October, 1979.

## COMPLETE SPECIFICATION ACCEPTED

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"The classifications given below in respect of each specification are according to Indian Classification and International Classification".

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CLASS : 207. 152479.  
Int. Cl. : B27d 1/00.

## "WOOD CHIP BOARD AND PROCESS FOR THE PREPARATION THEREOF".

Applicant : REICHHOLD LIMITED, A COMPANY ORGANISED AND EXISTING UNDER THE LAWS OF THE PROVINCE OF ONTARIO, OF 600 THE EAST MALL, ISLINGTON, ONTARIO, CANADA.

Inventors : KRISHAN KUMAR SUDAN & ANTONIE BERCHEM.

Application for Patent No. 480/Del/79 filed on 4th July, 1979.

Convention date 20th July 1978 (307, 775)/(Canada).

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

19 Claims.

A wood chip board comprising a wood chip furnish bonded together by means a binder wherein the separate chips making up the furnish are bonded together by a substantially

continuous bond over a major proportion of their surface area, and wherein the board contains less than 15% by weight of binder, based on the dry weight of the wood chip furnish.

(Compl. specn. 23 pages. Drg. 2 sheets).

CLASSES : 85 J, B & 97 F. H.

152480.

Int. Cl. : F27d 1/16.

## "AN APPARATUS FOR COMPACTING THE CARBONATED PASTES IN THE LININGS OF METALLURGICAL FURNACES."

Applicant : ALUMINIUM PECHINEY, A FRENCH COMPANY, OF 28, RUE DE BONNE, 69003 LYON, FRANCE.

Inventors : BENOIT SULMONT & GERARD HUDAULT.

Application for Patent No. 484/Del/79 filed on 5th July, 1979.

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-10005.

9 Claims.

An apparatus intended for compacting carbonated pastes in the linings of metallurgical and electrometallurgical furnaces, characterised in that it comprises in combination a device for generating vibrations having an amplitude of between 1 and 50 mm, a means of transmitting the vibrations to the carbonated paste, a device for generating static pressure, the thrust of which is directed approximately in the direction of compaction and means of shifting and orientating it in all positions in space demanded by the compacting operations, the said apparatus also including optional means to remotely control or to complete automatic the operation of the device (Compl. specn. 12 pages. Drg. 2 sheets).

CLASS : 206 G, I.

152481.

Int. Cl. : H03k, 13/00, 13/32.

## "A MONITORING CIRCUIT".

Applicant : SIEMENS-ALBIS AKTIENGESELLSCHAFT, OF ALBISRIEDERSTRASSE 245, CH-8047, ZURICH, SWITZERLAND, A SWISS COMPANY.

Inventor : NIKOLAUS MOLNAR & EDGAR ZURKIRCHEN.

Application for Patent No. 485/Del/79 filed on 5th July, 1979.

Convention date 23rd March, 1979 (45461/79)/(Australia).

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

8 Claims.

A circuit for monitoring the correct mode of operation of the coder and decoder of a PCM system, comprising a test signal generator which emits a test signal which is compared in a comparator circuit, with an output signal produced from the test signal itself when it has passed through the coder and decoder circuits, wherein an alarm is triggered in the event of a deviation, which exceeds an adjustable quantity, between the two signals connected to the comparator circuit, characterised in that the comparator circuit is included in an analysis circuit having an input connected with the output of a frequency-dependent amplifier circuit which has a first input connected with an output of the test signal generator and a second input connected with the output of the decoder, said frequency-dependent amplifier circuit delivering a difference signal from both input signals and having means, with which the amplitudes of those frequency components of the coded/decoded test signal which are accompanied by the quantization noise are emphasized, and that in the analysis circuit this difference signal is compared with at least one alarm threshold which is dependent upon the test signal amplitude.

(Compl. specn. 18 pages. Drg. 4 sheets).

CLASS : 98 I.

152482.

Int. Cl.: F24j 3/02.

**"A SOLAR WATER HEATER SYSTEM HAVING A STORAGE TANK".****Applicants :** BHARAT HEAVY ELECTRICALS LIMITED, 18-20 KASTURBA GANDHI MARG, NEW DELHI-110001, INDIA, AN INDIAN COMPANY.**Inventors :** RAJINDER KUMAR SURI, SURESH CHANDRA & ANANTHASUBRAMANIAM VISWANATHAN.

Application for patent no. 903/Del/80 filed on 17th December, 1980.

Divisional of application No. 468/Del/79 filed on 27th June, 1979 and post dated to 27th October, 1979.

**Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.****4 Claims**

A solar water heater system having a storage tank comprising a solar collector having an inlet header and an outlet header being connected directly or through an expansion valve to said storage tank characterized in that the pipe line from the lowest part in its circuit is disposed horizontally or rising in the direction of flow of the water.

(Compl. specn. 9 pages. Drag. 1 sheet).

CLASS : 98 I.

152483.

Int. Cl.: F24j 3/02.

**"A SOLAR WATER HEATER SYSTEM HAVING A STORAGE TANK".****Applicants :** BHARAT HEAVY ELECTRICALS LIMITED, 18-20 KASTURBA GANDHI MARG, NEW DELHI-110001, INDIA, AN INDIAN COMPANY.**Inventors :** RAJINDER KUMAR SURI, SURESH CHANDRA & ANANTHASUBRAMANIAM VISWANATHAN.

Application for patent no. 904/Del/80 filed on 17th December, 1980.

Divisional of application No. 468/Del/79 filed on 27th June, 1979 and post dated to 27th October, 1979.

**Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.****3 Claims**

A solar water heater system having a storage tank, the outlet of said tank connected in an inlet header of a collector, said collector having an outlet header connected to the storage tank through an expansion valve characterized in that the expansion valve is connected to a flow pipe through an inlet and an outlet.

(Compl. specn. 6 pages. Drag. 1 sheet).

CLASS : 32F2b.

152484.

Int. Cl.: C 07 d 99/00.

**A PROCESS FOR THE SYNTHESIS OF CONDENSED NITROGEN HETEROCYCLES DERIVED FROM INDAN-1, 3-DIONE.****Applicant :** INDIAN INSTITUTE OF TECHNOLOGY, I.I.T. P.O., MADRAS-600 036, TAMIL NADU.**Inventors :** (1) DR. SUKURU RAGHU RAMADAS, (2) DR. DEVALLA VENKATA RAMANA and (3) PATIN-CHARE VEETIL PADMANBHAH.

Application No. 102/Mas/80 filed June, 7, 1980.

Complete specification left September 7, 1981.

**Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.****2 Claims**

A process for the synthesis of condensed nitrogen heterocycles derived from indan-1, 3-dione comprising the dissolution of 2-phenacylindan-1, 3-dione or 2, 2-Bisphenacylindan-1, 3-dione in a solvent, such as anhydrous acetic acid, ethanol; admixing therewith an additive such as ammonium acetate, hydrazine hydrate, hexamethylenetetramine; refluxing the resulting mixture; and crystallising the same thereafter.

(Prov. 8 pages. Compl. specn. 7 pages. Drwg. 1 sheet).

CLASS : 32 E.

152485.

Int. Cl.: C 08 f 3/04, 29/04.

**IMPROVED PROCESS FOR POLYMERIZING ETHYLENE.****Applicants :** NISSAN CHEMICAL INDUSTRIES LTD., OF 7-1, 3-CHOME, KANDA-NISHIKI-CHO, CHIYODA-KU, TOKYO, JAPAN.**Inventors :** 1. KAZUMI TSUBAKI, 2. HIROSHI MORINAGA, 3. YOSHIHO MATSUO AND 4. TAKESHI IWABUCHI.

Application No. 476/Cal/79 filed May 8, 1979.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.****8 Claims**

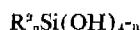
In a process for polymerizing ethylene alone or ethylene in admixture with a small amount of another  $\alpha$ -olefin or conjugated diolefin in two successive polymerization steps, the improvement comprising :

polymerizing 30 to 70 wt. % of said ethylene or ethylene mixture in the presence of hydrogen at a molar ratio of ethylene or ethylene mixture to hydrogen of 1 : 1-8 in the gaseous phase of the polymerization system in the first step and polymerizing the residual amount of said ethylene or ethylene mixture in the second step at an ethylene or ethylene mixture : hydrogen molar ratio of 1 : 0-0.3 in the gaseous phase of the polymerization system, wherein the catalyst in each of said polymerization steps comprises the combination of (1) an organoaluminium compound (c) selected from the group consisting of organoaluminium compounds sufficient for preparing Ziegler type catalysts and (2) a specific solid catalyst component (B) obtained by reacting (II) a titanium or vanadium halogen containing compound with a reaction product (A) obtained by reacting (I) a Grignard reagent with a silicon compound selected from the group consisting of a hydro-polysiloxane having the formula :



2

wherein R is a monovalent alkyl, aryl, aralkyl, alkoxy or aryloxy group, a is O, 1 or 2, b is 1, 2 or 3 and  $a+b \leq 3$  and a silicon compound including the formula :



wherein R<sup>1</sup> is a monovalent alkyl, aryl, aralkyl, alkoxy or aryloxy and n is 1, 2 or 3, said reaction (II) being in the presence or absence of an aluminum alkoxide, an aluminum alkoxyhalide or the reaction product obtained by reacting an alkoxyaluminum compound with water.

(Compl. specn. 32 pages. Drg. Nil).



O

-NHCOO-P(OR)<sub>2</sub> group wherein R has the significance defined above.

(Compl. specn. 48 pages. Drg. 1 sheet).

CLASS : 152 F.

152488.

Int. Cl. : C 08 f 29/18.

**SOLID THERMOPLASTIC RESIN COMPOSITION CONTAINING A FILLER AND A METHOD OF PRODUCING THE SAME.**

Applicants : ELKEM A/s, OF MIDDELTHUMS GATE 27, OSLO 3, NORWAY.

Inventors : 1. WILLIAM SIDNEY UNDERWOOD AND 2. LOUIS BOHM.

Application No. 948/Cal/79 filed September 10, 1979.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

A solid resin composition suitable for forming into artifacts, which composition contains thermoplastic resin and, as a filler, a particulate amorphous silica present in an amount of upto 250 parts per 100 parts of resin, characterised in that the said particulate amorphous silica consists of at least 86% by weight of SiO<sub>2</sub> and has a real density of 2.20-2.25 g/cm<sup>3</sup> and a specific surface area of 18-22m<sup>2</sup>/g, the particles being substantially spherical and at least 60% by weight of the particles having a particle size of less than 1 micron.

(Compl. specn. 35 pages. Drg. Nil).

CLASS 205 B.

152489.

Int. Cl. : B 60 c 21/00.

**A MODULAR TIRE COMPONENT SERVICER FOR USE WITH A TIRE COMPONENT BUILDING DRUM.**

Applicants : NRM CORPORATION OF 3200 GILCHRIST ROAD, P.O. BOX 6338, AKRON, OHIO 44312, U.S.A.

Inventors : 1. JOSEPH MARION MARTIN, and 2. GEORGE EUGENE ENDERS.

Application No. 1122/Cal/79 filed October 27, 1979.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

62 Claims

A modular tire component servicer for use with a tire component building drum comprising a plurality of stacked servicer modules, each module comprising dispensing means for a tire component and means to convey such tire component to said dispensing means for application of such component to the drum.

(Compl. specn. 27 pages. Drgs. 6 sheets).

CLASS : 34 A, 90 F & 136 E.

152490.

Int. Cl. C 03 b 37/00; D 01 d 1/00, 1/08.

**APPARATUS FOR PRODUCING FIBRES CONSTITUTED BY A THERMOPLASTICS MATERIAL.**

Applicants : SAINT-GOBAIN INDUSTRIES, OF 62, BOULEVARD VICTOR HUGO, 92209 NEUILLY SUR SEINE, FRANCE.

Inventors : 1. KLAUS SISTERMAN AND 2. KLAUS GAERTNER.

Application No. 1214/Cal/79 filed November 20, 1979.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

Apparatus for producing fibres, constituted by a thermoplastics material, in particular mineral fibres, by attenuation of molten thermoplastics material by means of a hot accelerated high speed gas current produced by burner equipment, said apparatus comprising at least two burners, provided with a combustion chamber and arranged side by side, to create gaseous currents at high temperature supplied at high speed by nozzles provided at the exit of the burners, measuring devices for measuring the temperature and pressure of the gases, said combustion chambers of the said burners being juxtaposed and separated from one another by partitions perforated by connecting channels in which are housed the measuring devices for the temperature and the pressure.

(Compl. specn. 11 pages. Drgs. 2 sheets).

CLASS : 32 E, 136 C & E.

152491.

Int. Cl. : B 29 d 1/00, 7/00; B 29 f 1/022, 3/00; C 08 f 3/04.

**A PROCESS FOR PRODUCING A NARROW MOLECULAR WEIGHT DISTRIBUTION LINEAR ETHYLENE POLYMER HAVING REDUCED MELT FRACTURE.**

Applicants : UNION CARBIDE CORPORATION OF 270 PARK AVENUE, NEW YORK, STATE OF NEW YORK, 10017, UNITED STATES OF AMERICA.

Inventors : 1. STUART JACOB KURTZ, 2. THEODORE ROBERT BLAKESLEE III AND 3. LEONARD SEBASTIAN SCAROLA.

Application No. 26/Cal/80 filed January 7, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

16 Claims

A process for producing a narrow molecular weight distribution linear ethylene polymer having reduced melt fracture, particularly sharkskin melt fracture, under conditions of flow rate and melt temperature which would otherwise produce higher levels of melt fracture, which comprises extruding a narrow molecular weight distribution linear ethylene polymer such as herein defined through a die having a die gap of at least 50 miles and wherein at least a portion of one surface of die lip and/or die land in contact with the molten polymer is at an angle of divergence or convergence relative to the axis of flow of the molten polymer through the die.

(Compl. specn. 72 pages. Drg. 3 sheets).

CLASS : 32F<sub>2a</sub>; 55F, & 60X<sub>2d</sub>.

152492.

Int. Cl. : A 61 k 27/00; C 07 c 27/00.

**IMPROVED PROCESS FOR THE PREPARATION OF MONO, DI, TRI, AND TETRA-ESTERS OF ALCOHOLS.**

Applicants : OMNIUM FINANCIER AQUITAINE POUR L'HYGIENE ET LA SANTE (SANOFI), OF TOUR AQUITAINE, F- 92400, COURBEVOIE, FRANCE.

Inventors : 1. MICHEL CHIGNAC, 2. CLAUDE GRAIN, 3. FERNAND JAMMOT, 4. CHARLES PIGEROL, 5. PIERRE EYMAR AND 6. BERNARD FERRANDES.

Application No. 261/Cal/80 filed March 6, 1980.

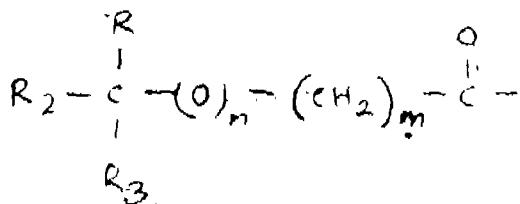
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

3 Claims

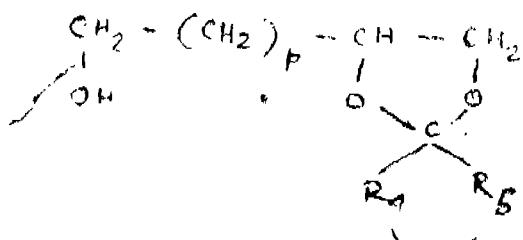
An improved process for the preparation of mono-, di-, tri- and tetra-esters of alcohols such as herein described comprising reacting an acid-chloride of an acid of the formula

R-OH

in which R represents an acyl radical of the general formula I,



in which n represents 0 or 1, m represents 0, 1, 2, 3 or 4, R<sub>1</sub> and R<sub>2</sub> each represent a straight or branched-chain alkyl-radical having from 1 to 5 carbon atoms, R<sub>3</sub> represents hydrogen or a straight or branched-chain alkyl radical having from 1 to 5 carbon atoms, the sum of the carbon atoms in R<sub>1</sub> and R<sub>2</sub> being from 4 to 10 when R<sub>3</sub> represents hydrogen and the sum of the carbon atoms in R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> being from 6 to 15 when R<sub>3</sub> is different from hydrogen, or R<sub>1</sub> and R<sub>2</sub> when they are taken together represent a tetramethylene, pentamethylene or hexamethylene radical and R<sub>3</sub> represents a straight chain-alkyl radical, with an alcohol selected from the group consisting of glycerol, 2, 3-epoxy-propanol, 1, 2-propanediol, 1, 3-propanediol, 1, 2-butanediol, 1, 3-butanediol, 1, 4-butanediol, 1, 2, 3-, -butanetriol, 1, 2, 4-butanetriol, 1, 2, 3, 4-butanetetrol, 2-buten-1, 4-diol, 2-butyne-1, 4-diol, diethyleneglycol, a cyclohexanediol preferably 1, 2-cyclohexanediol, thioglycol, diethanolamine, N-Alkyl-substituted-diethanolamine, trimethylpropane, pentaerythritol or an alcohol of the general formula II,



in which P represents 0 or 1, R<sub>1</sub> represents methyl, R<sub>2</sub> represents methyl, ethyl, ethyl, 2-methyl-butyl or R<sub>1</sub> and R<sub>2</sub>, when they are taken together represent a pentamethylene radical, with the exception of glyceryl tri-(di-n-propylacetate), in a basic solvent like pyridine.

(Compl. specn. 67 pages. Drgs. 12 pages).

CLASS : 88 A & D; 123 & 164 A.

152493.

Int. Cl. : A 01 c 3/02; C 05 f 3/00; C 10 j 1/00.

**A METHOD FOR CONVERTING ZOOTECHNIC LIQUID MATERIAL INTO COMBUSTIBLE GASES AND FERTILIZING MUD.**

Applicants : GIZA S.P.A. OF VIA PROVINCIALE SUD, 6, 42011 BANGNOLO IN PIANO, REGGIO EMILIA, ITALY.

Inventors : VLADIMIRO POZZI.

Application No. 468/Cal/80 filed April 23, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims.

A process for converting zootechnic liquid materials into combustible gases and fertilizing mud, wherein a zootechnic liquid material is kept under stirring within an air sealed vessel or container for a time ranging between 10 and 20 days and at a temperature of 30°-40°C., during such a process said combustible gases being developed and high grade fertilizing muds formed.

(Compl. specn. 6 pages. Drg. 1 sheet).

2-437GI/83

CLASS : 107 H.

152494.

Int. Cl. : F 02 m 55/00.

**Liquid INJECTION PUMP.**

Applicants : STANADYNE INC., OF 92 DEERFIELD ROAD, WINDSOR, CT, U.S.A.

Inventors : 1. CHARLES WADE DAVIS AND 2. CHARLES JAMES DONAHUE.

Application No. 815/Cal/80 filed July 16, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 Claims.

A liquid fuel injection pump having a longitudinal bore, a rotary distributor journaled in the bore, the distributor providing a pair of generally radial communicating non-coaxial bores, a pair of pumping plungers slidably mounted in said non-coaxial bores to form a pumping chamber therebetween, and a cam ring mounted about the axis of rotation of the distributor and having cam lobes to impart simultaneous inward movement to the pumping plungers as the distributor rotates characterized in that the distributor and the longitudinal bore define chamber means therebetween, passage means in the distributor providing continuous communication between the chamber means and the pumping chamber with the chamber means being angularly disposed to create a hydraulic force on said distributor substantially radially aligned with but in a direction opposite to the radial vector of side loading imposed on the distributor during the pumping stroke of the pumping plungers.

(Compl. specn. 12 pages. Drg. 1 sheet).

CLASS : 195 A F.

152495.

Int. Cl. : B 60 c 29/00.

**AN AIR VALVE FOR TYRE TUBE.**

Applicants & Inventors : KYUNG DONG LEE OF 326 JI-YOUNG-RI, BYOKJAE-MYUN, GOYANG-KUN, GYUNG-GIDO, KOREA.

Application No. 944/Cal/80 filed August 19, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

10 Claims

An air valve for a tyre tube, comprising a valve body having a bore constituting part of an internal air path way and a valve unit fastened partially within the said bore by means of screw threaded engagements, sealing means being provided between the body and the valve unit, the said valve unit having a stainless spring biased valve element co-operating with an inlet opening of the valve.

(Compl. specn. 5 pages. Drg. 1 sheet).

CLASS : 32 A 2.

152496.

Int. Cl. C 09 b 45/08.

**A PROCESS FOR THE MANUFACTURE OF COPPER COMPLEX FORMAZAN COMPOUNDS.**

Applicants : HOECHST AKTIENGESELLSCHAFT OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

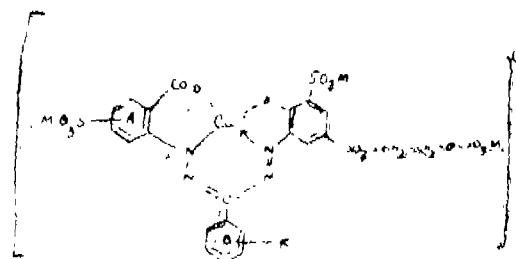
Inventors : 1. GUNTHER SCHWAIGER and 2. ERNST HOYER.

Application No. 1244/Cal/80 filed November 3, 1980.

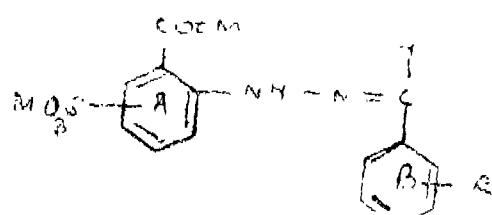
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 6 Claims

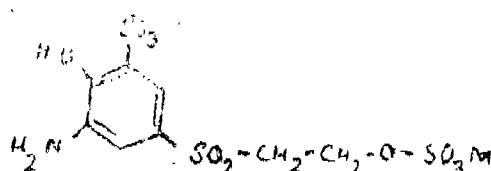
A process for the manufacture of a copper complex formazan compound for the formula (1)



in which M is hydrogen or the equivalent of a metal and R is hydrogen or chlorine, which comprises reacting an aromatic hydrazone compound of the formula (2).



herein R and M are as defined above, with the diazonium compound of an aromatic amine of the formula (3).



wherein M is as defined above, and with a copper-donating agent.

(Compl. specn. 15 pages. Digs. 2 sheets).

CLASS 129 G.

152497.

Int. Cl. : B 23 b 47/00.

## A MACHINING HEAD SUPPORTING STRUCTURE.

Applicants : THE CROSS COMPANY OF 17801 FOURTEEN MILE ROAD, FRASER, MICHIGAN 48026, UNITED STATES OF AMERICA.

Inventors : SIGFRIED KRAUS.

Application No. 1320/Cal/80 filed November 28, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 16 Claims

A machining head supporting structure in a machine tool comprising laterally spaced parallel ways; a reciprocable saddle advanceable and retractable on said ways and adapted to carry a tool head; a bed carrying said ways and supporting said saddle, said bed having top structural means attached to and extending between said ways for substantially the entire length thereof and providing a solid continuous tie between said ways whereby to minimize deflection and spreading thereof in use; a center base provided with chip disposal means; a wing base carrying said bed and positioning the forward end of said top structural means adjacent to said chip disposal means;

wiper means on said saddle snugly fitting said ways and the top portion of said bed operative to push chips accumulating on the latter ahead of the saddle when the latter is

advanced on said ways; and drive means for advancing and retracting said saddle on said ways operative to position said saddle at the forward limit of its travel with said wiper means proximate to said chip disposal means.

(Compl. specn. 26 pages. Digs. 1 sheet).

CLASS : 107 G.

152498.

Int. Cl. : F 23 d 7/00, 9/00.

## LIQUID FUEL BURNER FOR PREHEATING INTAKE AIR OF INTERNAL COMBUSTION ENGINE.

Applicants : CUMMINS ENGINE COMPANY, INC., OF 1000 5TH STREET, COLUMBUS, INDIANA 47201, UNITED STATES OF AMERICA.

Inventors : 1. RUEL D. SMITH AND 2. JOSEPH M. JOHNSON.

Application No. 1179/Cal/79 filed November 13, 1979.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

A liquid fuel burner, in particular for preheating the combustion air of internal-combustion engines in which a jet which is fed with fuel is located at one end wall of an axially symmetrical combustion chamber, formed by a sleeve, and coaxially to the sleeve, in which the combustion chamber has at the end wall opposite the jet a coaxial combustion gas outlet port, in which apart from a partial combustion gas flow leaving the outlet port a further toroidal partial combustion gas flow is formed inside the combustion chamber behind the front end wall, in which the fuel is emitted from the jet in the form of a coaxial atomizing cone, the vertex of which is located in the outlet of the jet, and in which the toroidal partial combustion gas flow produces a low-pressure zone in the area of the outlet port, into which ambient air is sucked, characterized by the fact that the combustion chamber has in a manner known per se a well shaped as a surface of revolution and the base of the atomizing cone is separated from the outlet port and from the wall in each case by such distances (a) and (b) that the ambient air enters the low pressure zone by the rim area of the outlet port.

(Compl. Specn. 16 pages. Digs. 2 sheets).

CLASS : 14 A2 & a.

152499.

Int. Cl. : H 01 m 39/00.

## LEAD SALT ELECTRIC STORAGE BATTERY.

Applicants : PETER OLAF HENK OF CEDERVEJ 14, DK-3650 OLSTYKKE, DENMARK, AND PETER AXEL FISCHER OF TRANEVAENGET 4, DK-2900 HELLERUP, DENMARK.

Inventors : ZIEMOWIT ALEXANDER ADAM PIONTOWSKI.

Application No. 33, Cal/80 filed January 10, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

Lead salt electric storage battery with electrodes of first order, having an active anode body comprising graphite, characterized by the combination of the following features :

(a) the active anode body (4, 19, 48) consists of a textile material graphitized at a temperature of at least 2500°C,

(b) the active anode body (4, 19, 48) is connected with an electrolyte-impervious, electrically conductive cell closure (1, 11, 12, 41, 42) consisting of moulded artificial resin with moulded-in, uniformly distributed short-cut graphite fibers likewise graphitized at a temperature of at least 2500°C,

(c) the connection between the active anode body (4, 19, 48) and the cell closure (1, 11, 12, 41, 42) is established either by gluing with an artificial resin glue (5) with mixed in short-cut graphite fibers, likewise graphitized at a temperature of at least 2500°C, or by embedding fibers at the surface of the active anode body in the artificial resin of the cell closure by temporary softening of the surface of said artificial resin by heat or by the application of a volatile solvent,

(d) the electrolyte consists of lead silicofluoride ( $PbSiF_6$ ) and/or lead methane sulfonate [ $Pb(CH_3SO_3)_2$ ] dissolved in water.

(Compl. specn. 11 pages. Drgs. 3 sheets).

CLASS : 68 E<sub>8</sub> & 194 C<sub>6</sub> c.

152500.

Int. Cl. : H 01 j 19/80, 19/82, 61/56, 65/00.

#### HIGH-FREQUENCY ELECTRODELESS LAMPS.

Applicants : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventors : JAMES WILLIAM JUSTICE.

Application No. 155/Cal/80 filed February 8, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 8 Claims.

A high frequency electrodeless lamp designed to operate with a rated power consumption when energized with predetermined radio frequency energy as generated by a radio-frequency power source, said radio-frequency power source having an output portion comprising a tuned circuit having a resonant frequency which approximates said predetermined radio frequency at which said lamp is to be operated, said lamp comprising :

a sealed light-transmitting globular-shaped envelope of predetermined dimensions, a discharge-sustaining medium within said envelope, and a layer comprising phosphor material carried on the interior surface of said envelope;

a core operatively positioned in energy transferring relationship with respect to said envelope said core principally comprising magnetic material of high permeability and having a looped configuration of predetermined dimensions and also having predetermined cross-sectional dimensions, and a power winding having a predetermined number of turns wrapped about said core;

a pair of power input terminals connecting to said power winding for connection to said radio-frequency power source, said power winding and core comprising a part of said tuned circuit output portion of said radio-frequency power source, and during operation of said lamp, the radio-frequency energy passed through said power winding creates radiofrequency electromagnetic fields through and about said core and within said envelope to excite said discharge-sustaining medium to emit short wavelength radiations, and said layer comprising phosphor is responsive to said short wavelength radiations to emit visible radiations which pass through said envelope; and

an additional feed-back signal winding having a predetermined number of turns wrapped about said core and connecting to a pair of feed-back signal output terminals of said lamp, with a high-efficiency radio-frequency CLASS E oscillator circuit which is adapted to be connected to all of said lamp terminals for energizing said lamp and which comprises :

(a) circuit input terminals adapted to be connected to a source of A.C. energizing potential, and circuit power output terminals adapted to be connected to said power input terminals of said device for connection to said lamp power winding;

(b) rectifier means connecting across said circuit input terminals for rectifying the A.C. energy to provide across two D.C. output terminals thereof a D.C. potential of predetermined value;

(c) transistor means for providing radio-frequency oscillations and having base, collector and emitter terminals, the base terminal of said transistor means connecting through a resistor of predetermined value to the more positive output terminal of said rectifier means and to one of said power output terminals, load-network capacitor means of predetermined value connecting between the more positive output terminal of said rectifier means and the collector terminal of said transistor means, load-network inductor means of predetermined value connecting between the collector terminal of said transistor means and one of said circuit power output terminals, said transistor means having a short collector current fall time; and,

(d) tuned circuit capacitor means of predetermined value connected across said circuit power output terminals and forming with said lamp winding and said lamp core, as connected thereacross, a tuned circuit having a resonant frequency which establishes the radio frequency at which said device is to be operated; and

(e) said oscillator circuit also having a pair of feed-back signal input terminals which are adapted to be connected to said feed-back signal output terminals of said device, one of said circuit feed-back signal input terminals electrically connects to one of said DC output terminals of said rectifier means, and the other of said circuit feed-back signal input terminals electrically connects to the base terminal of the said transistor means through a phase-controlling capacitor so that when said lamp is connected to said oscillator circuit, there is provided feed-back oscillatory energy for said transistor means.

(Compl. specn. 21 pages. Drgs. 5 sheets).

CLASS : 32 C & 40 F.

152501.

Int. Cl. : C 07 b 13/00.

#### IMPROVED METHOD FOR THE FILM SULPHONATION IN A MULTI-TUBULAR REACTOR.

Applicants : BALLESTRA CHIMICA S.P.A. OF VIA FANTOLI 21/17, MILAN, ITALY.

Inventors : 1. GIOVANNI MORETTI AND 2. SERGIO NOE'.

Application No. 203/Cal/1980 filed February 22, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims.

A method of sulphonating or sulphating an organic liquid reagent with a gaseous reagent comprising sulphur trioxide and a carrier gas, the method comprising : feeding the liquid reagent from a common liquid feeding chamber, maintained completely full, into a plurality of substantially identical parallel vertical tubes through respective annular slots so as to form a film of the liquid reagent on the internal surface of each tube, each tube having a length of 5 to 7 m and an internal diameter of 20 to 30 mm; feeding the gaseous reagent into the tubes above the annular slots from a common gas feeding chamber on top of the tubes, the feeding pressure of the gaseous reagent being in the range from 0.1 to 0.5 bar, being substantially the same as the head loss of the gaseous reagent flow through the individual tubes with the liquid reagent films, and being less than the feeding pressure of the liquid reagent, the feeding overpressure of the liquid reagent with respect to the feeding pressure of the gaseous reagent being 5 to 15 cm of liquid column; externally cooling the tubes by a liquid cooling medium flowing in a common shell surrounding all the tubes; and collecting the reaction products in a common collecting chamber communicating with the bottoms of the tubes.

(Compl. specn. 29 pages. Drgs. 2 sheets).

CLASS : 131 A.

152502.

Int. Cl. : E 21 d 1/00.

## SINGLE-BRACE HEADGEAR FOR WINDING SHAFT FOR MINING.

Applicants : GUTEHOFFUNGSCHUTTE STERKRADH AKTIENGESELLSCHAFT OF BAHNHOFSTER. 66, 4200 OBERHAUSEN 11, WEST GERMANY.

Inventors : 1. DR. ANSELM HOISCHEN, 2. GUSTAV-ADOLF QUEDNAU AND 3. FRANZ-JOSEF LUNING.

Application No. 524/Cal/80 filed May 6, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 1 Claim

Single-brace headgear for a winding shaft for mining, characterised in that for two double-strand winding systems (16, 17), four headgear pulley platforms (9, 10, 11, 12) are disposed one above another, on which the headgear pulleys (5, 6, 7, 8) are accommodated, and in that the ground mounted winders (13, 14) are erected side by side or one behind the other, and the axes of the winders are parallel to the longitudinal axes of the winding cages (16a) or tubes (17a).

(Compl. specn. 7 pages. Drgs. 2 sheets).

CLASS : 40 F &amp; 139 A.

152503.

Int. Cl. : B 01 j 1/00; C 09 c 1/48.

## AN IMPROVED CARBON BLACK PRODUCING APPARATUS AND METHOD.

Applicants : SID RICHARDSON CARBON &amp; GASOLINE CO OF 31ST FLOOR FORT WORTH NATIONAL BANK BUILDING, FORT WORTH, TEXAS 76102, U.S.A.

Inventors : 1. RICHARD EDWARD DRISCOLL, 2. CLINTON MARSH WRIGHT, AND 3. WILLIAM BOYD ATKINS.

Application No. 788/Cal/80 filed July 8, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

Improved apparatus for producing carbon black, including an axial flow convergent reactor zone, oil feedstock injection nozzles connecting into the reaction zone and an axial flow burner assembly supplying a stream of high velocity combustion gases and characterized by said burner assembly having a housing defining a convergent-divergent combustion zone, an air plenum, a fuel gas annulus extending through said plenum with a plurality of gas ports at its inner end to inject gaseous fuel into the air flowing therearound for combustion in said combustion zone, a liquid fuel line extending through said plenum with means supplying atomizing gas thereto and a plurality of liquid fuel ports at the inner end of said liquid fuel line.

(Compl. specn. 14 pages. Drgs. 3 sheets).

CLASS : 29 D.

152504.

Int. Cl. : G 11 b 11/00.

## AN APPARATUS COUPLED TO A HOST SYSTEM FOR USE AS A RETRIEVEABLE INFORMATIONAL DATA STORE FOR SAID SYSTEM.

Applicants : BURROUGHS CORPORATION OF BURROUGHS PLACE, DETROIT, MICHIGAN 48232, UNITED STATES OF AMERICA.

Inventors : 1. PETER MARTIN BARRATT.

Application No. 842/Cal/80 filed July 23, 1980.

Convention date 2nd August, 1979 (26894/79) U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 17 Claims

An apparatus coupled to a host system for use as a retrievable informational data store for said system, in which apparatus transducing means are positionable, responsive to command signals from said host, by positioning means, to be disposed adjacently to selectable radii on the surface of a rotary medium for data deposition thereon or data retrieval therefrom, said apparatus comprising; monitoring means for monitoring said command signals and for providing indication when said host system does not require said transducing means to be positioned adjacently to a particular radius on said medium, and transducer position distribution means, operable responsive to said indication by said monitoring means, to vary the radius of adjacent disposition of said transducing means to said medium so long as said indication is provided.

(Compl. specn. 39 pages. Drgs. 8 sheets).

CLASS : 194 C.

152505.

Int. Cl. : H 01 l 1/00, 15/00.

## PHOTOVOLTAIC SOLAR CELLS AND METHOD OF MAKING SAME.

Applicants : SES, INCORPORATED OF ONE TRALPE INDUSTRIAL PARK, NEWARK, DELAWARE 19711, U.S.A.

Inventors : RICHARD LEROY MOYER.

Application No. 857/Cal/80 filed July 25, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 45 Claims

A photovoltaic solar cell comprising :

- (a) an electrically conductive first electrode;
- (b) a film of a first semi-conductor material of one type conductivity covering at least a portion of said first electrode;
- (c) a film of a second semiconductor material of opposite type conductivity and forming a p-n junction with the first semiconductor material; and
- (d) a second electrode, in electrical contact with said second semi-conductor material and which allows radiant energy to pass into the second semiconductor material, said second electrode comprising one or more electrically conductive metal wires coated with a solid polymer containing electrically conductive particles.

(Compl. specn. 20 pages. Drg. 1 sheet).

CLASS : 186 B; 206 B.

152506.

Int. Cl. : H 04 j 3/00.

## A TIME SLOT MULTIPLE CIRCUIT.

Applicants : SIEMENS AKTIENGESELLSCHAFT OF BERLIN AND MUNICH, WEST GERMANY.

Inventors : 1. REINER BINZ AND 2. NORBERT POINTNER.

Application No. 869/Cal/80 filed July 29, 1980.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims.

A time slot multiple circuit for selective establishment of connections in a t.d.m. digital telecommunications system, said multiple circuit including a signal store for receiving and storing incoming signals at addresses respectively assigned to

the channel time slots in which the incoming signals are transmitted, a control store for storing associations between signal store addresses and outgoing channel time slots, an address register for supplying said associations to the control store, said address register including means for indicating the transmission rate of the signals stored at each signal store address, means for addressing the control store cyclically so as to determine outgoing channel time slots for appropriate signals stored at respective associated signal store addresses, means for writing said associations into the control store in accordance with the cyclic operation of the control store addressing means and arranged for associating automatically, in dependence on said transmission rate indication, each outgoing channel time slot with all the store signal addresses assigned to receive signals transmitted in the incoming channel to be connected to the relevant outgoing channel.

(Compl. specn. 21 pages. Drgs. 4 sheets).

CLASS : 29 D. 152507.  
Int. Cl. : G 06 f 9/00.

**DIGITAL COMPUTER HAVING PROGRAMMABLE STRUCTURE.**

Applicants : BURROUGHS CORPORATION OF BURROUGHS PLACE, DETROIT, MICHIGAN 48232, UNITED STATES OF AMERICA.

Inventors : 1. HANAN POTASH, 2. BURTON LEE LEVIN AND 3. STEPHEN J. C. CHAN.

Application No. 1164/Cal/80 filed October 14, 1980.

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972 Patent Office, Calcutta).

**30 Claims**

A digital computer having a control section for sequentially generating addresses to a control memory from digital data of any kind, said control section being comprised of :

a plurality of programmable memory means, each of said memory means having first address inputs, second address inputs coupled to receive a portion of the presently active control word from said control memory, and a pair of outputs;

A plurality of register means for storing said digital data, each of said register means having its  $i$ th bit coupled to the first address inputs on the  $i$ th one of said memory means, where  $i=1, 2 \dots N$ ,  $N$  being the total number of programmable memory means; each of said memory means including means responsive to the control word portion on its second address inputs for generating signals on its pair of outputs representing programmable arithmetic transformations of the bits on its first address in pairs; and means for combining said signals on said pair of outputs from all of said memory means into said control memory address.

(Compl. specn. 32 pages. Drgs. 5 sheets).

CLASS : 66D; 194 C, c. 152508.  
Int. Cl. : H 01 k 9/00.

**IMPROVEMENTS IN OR RELATING TO ELECTRIC FILAMENT LAMP.**

Applicants & Inventors : CHANDRAKANT MAGANLAL SHAH OF 8, CAMAC STREET, CALCUTTA-700017, WEST BENGAL, INDIA.

Application No. 1387/Cal/80 filed December 16, 1980.

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972 Patent Office, Calcutta).

**6 Claims**

An electric filament lamp comprising in combination, an electric lamp having a plurality of filaments, a holder for the lamp, and a multi-way switch for energising or de-energising

any one or two or more of the said filament(s) of the lamp, characterised in that one terminal of each of the said filaments is connected at a common junction point, while the other terminal of each of the said filaments leads to corresponding number of insulatedly separated conductor pieces provided at the base of the lamp, that the said multi-way switch has a movable contact member of insulating material, said contact member being provided with a plurality of interlinked electrically conductive connecting points and an "Off" point and that the said lamp holder has connecting means to hold the lamp with two insulatedly separated contact points electrically contacting two of the said plurality of conductor pieces at the lamp base, and the wall thereof electrically contacting the said common junction point of the lamp, said lamp holder also having means to be connected to one of the leads of the mains supply, while the other lead of the mains supply is adapted to be connected to, or disconnected from any one or two of the conductor piece(s) of the lamp through the said connecting points or the said "Off" point of the said contact member of the switch as desired on the contact member being moved.

(Compl. specn. 10 pages. Drgs. 4 sheets).

CLASS : 133 A. 152509.  
Int. Cl. : H 02 p 1/00; 7/00.

**STATIC RELAY FOR PERFORMING LOGIC FUNCTIONS FOR MACHINE TOOLS AND OTHER CONTROL APPLICATIONS.**

Applicants : TATA ENGINEERING AND LOCOMOTIVE COMPANY LIMITED OF JAMSHEDPUR, STATE OF BIHAR, INDIA.

Inventors : JIBAN KRISHNA GUHA BARMAN.

Application No. 864/Cal/81 filed July 31, 1981.

Complete Specification left 2nd February, 1982.

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972 Patent Office, Calcutta).

**8 Claims**

A static relay system comprising a power supply unit, relay block unit and power block unit, the relay block including a plurality of solid state cupolar devices and having two terminals connected permanently to the positive terminal and the common ground terminal of the power supply unit, another terminal forming the excitation terminal, a plurality of pairs of contacts being normally closed contacts and another set of equal number of pairs of contacts forming normally open contacts, the said contacts being adapted to perform various logic functions and an LED indicator.

(Compl. specn. 22 pages. Drgs. 5 sheets).

CLASS : 6 A. 152510.  
Int. Cl. : F 01 c 11/00.

**MULTISTAGE COMPRESSOR FOR COMPRESSING GASES IN PARTICULAR OIL-FREE AIR.**

Applicants : GUTEHOFFNUNGSHUTTE STERKRADE AKTIENGESELLSCHAFT OF BAHNHOFSTR. 66, 42 OBERHAUSEN 11, WEST GERMANY.

Inventors : 1. KARL-HEINZ KONKA, 2. ARNO HEINZ 3. DR. -ING. HELMUT KAMMERER AND 4. DR. ING. WOLFGANG TWARZIOK.

Application No. 1105/Cal/79 filed October 25, 1979.

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 9 Claims.

Multistage compressor for compressing gases, in particular oil-free air, characterized in that flow compressors, in particular turbo-compressors of radial construction and displacement compressors, in particular screw compressors are connected in series according to the flow and connected by pipelines and each compressor stage is operated at its optimum speed via a branching gear with at least two output shafts.

(Compl. specn. 14 pages. Drgs. 3 sheets).

CASS : 107 C.

152511.

Int. Cl. : F 02 f 3/24.

## INTERNAL COMBUSTION ENGINE.

Applicants : CUMMINS ENGINE COMPANY, INC., OF 1000 FIFTH STREET, COLUMBUS, INDIANA 47201 U.S.A.

Inventors : 1. EDWARD WILLIAM KASTING AND 2. RICHARD EARL GLASSON.

Application No. 1160/Cal/1979 filed November 7, 1979.

Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

A head for an internal combustion engine having at least one pair of cylinders, each cylinder having an axis, said head having a bottom wall that forms the upper sides of said cylinders, an upper wall which is opposite to said bottom wall, internal walls between said upper and bottom walls, two intake air ports and two exhaust ports formed in said bottom wall of said head above each of said cylinders and angularly spaced around the axis of each cylinder, said intake air ports of each cylinder being adjacent each other and one of said intake air ports being between said cylinders, said exhaust ports of each cylinder being adjacent each other, said upper and lower walls and said internal walls forming an enlarged chamber between said pair of said cylinders and said chamber extending to said bottom wall, said internal walls extending around said intake air ports of said pair of cylinders and including the areas adjacent and encompassing said intake air ports of said pair of said cylinders, an air intake opening formed in said upper wall of said head above said chamber and between said cylinders and connected to said chamber for conveying intake air to said chamber, the intake air flowing generally parallel to said axis out of said chamber and through said air ports, said chamber having a flow area that is substantially greater than the flow area of said air intake opening and said air ports, and a relatively short exhaust passage for each cylinder formed in said head and connected to each pair of said exhaust ports, said chamber being between said exhaust passages.

(Compl. specn. 17 pages. Drgs. 2 sheets).

## OPPOSITION PROCEEDINGS

The application for Patent No. 150413 made by Sir Padampat Research Centre in respect of which two separate oppositions were entered by Chemical and Fibres of India Limited and Imperial Chemical Industries PLC as notified in the Gazette of India, Part-III, Section 2 dated the 16th April, 1983, has been treated as withdrawn.

## PRINTED SPECIFICATION PUBLISHED

A limited number of printed copies of the undenoted specification are available for sale from the Officer-in-Charge, Government of India, Central Book Depot, 8, Hastings Street, Calcutta two rupees per copy :—

(1)

141581

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144586 144594 144601 144625

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144996 145006 145008 145022 145027 145029

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151292 151307 151316 151318 151376.

## AMENDMENT PROCEEDINGS UNDER SECTION 57

Notice hereby given that Miner Enterprises, Inc., a Corporation of the State of Delaware, U.S.A. 1200 East State Street Geneva Illinois 60134, U.S.A. have made an application under section 57 of the Patent Act, 1970 for amendment of specification their patent application No. 151124 for "A method of making polyester elastomer compression spring". The amendments are by way of restriction for amendment and the proposed amendment can be inspected free of charge at the Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-70017, or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed Form 30 within three months from the date of this notification, at the Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice.

## REGISTRATION OF ASSIGNMENTS, LICENCES, ETC. (PATENTS)

Assignments, licences or other transactions affecting the interests of the original patentees have been registered in the following cases. The number of each case is followed by the names of the parties claiming interests :—

133941  
134587  
135773  
135774  
140646  
143551 } M/s. Spindelfabrik Suessen,  
Schurr, Stahlecker & Grill GmbH.

133941  
134587  
135773  
135774  
140646  
143551 } Limited.  
M/s. Suessen Textile Bearings

## RENEWAL FEES PAID

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## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class. 1. No. 153260. United States Surgical Corporation, a corporation of the State of New York having its offices at 150 Glover Avenue, Norwalk, Connecticut 06850, U.S.A. "Surgical Stapler". 15th July, 1983.

Class. 1. No. 153225. Narayanaswamy Naidu Duraiswamy of "Rajkala", Avanashi Road, Coimbatore 641 018, Tamil Nadu, India, Indian National. "Electric Motors". 23rd June, 1983.

Class. 1. No. 153196. DLF Universal Limited, of 21-22, Narindra Place, Parliament Street, New Delhi-110001, India, an Indian Company. "Box Fan". 13th June, 1983.

Class. 1. No. 153160. J. A. Industries, C/55/10, Gali No. 7, Chauhan Bangar, New Scelampur, Shahdara, Delhi-110153, an Indian Partnership concern. "Suit Case Locks and Brief Case Locks". 4th June, 1983.

Class. 3. No. 153261. United States Surgical Corporation, a corporation of the State of New York having its offices at 150 Glover Avenue, Norwalk, Connecticut 06850, U.S.A. "Surgical Stapler". 15th July, 1983.

Class. 3. No. 153667. Asian Advertisers, 20, Kala Bhavan, 3, Mathew Road, Opera House, Bombay-400004, Maharashtra, an Indian Partnership Firm. "Ice Bucket". 16th November, 1983.

Class. 3. No. 153672. Asian Advertisers, 20, Kala Bhavan, 3, Mathew Road, Opera House, Bombay-400004, Maharashtra, an Indian Partnership Firm. "Pen Stand". 16th November, 1983.

Class. 3. No. 153671. Asian Advertisers, 20, Kala Bhavan, 3, Mathew Road, Opera House, Bombay-400004, Maharashtra, an Indian Partnership Firm. "Paper weight". 16th November, 1983.

Class. 3. No. 153666. Asian Advertisers, 20, Kala Bhavan, 3, Mathew Road, Opera House, Bombay-400004, Maharashtra State, an Indian Partnership Firm. "Memo Rack-cum-penstand". 16th November, 1983.

Class. 3. No. 153484. Priy Foods Private Limited, Poranki, Vijayawada 521 137, Krishna District, Andhra Pradesh, India, a company duly organised and existing under the laws of the Union of India. "Bottles". 21st September, 1983.

Class. 3. No. 153593. Cello Plastic Industrial Works, Vakil Industrial Estate, Walbhat Road, Goregaon East, Bombay-400063, Maharashtra, an Indian Partnership Firm. "Mug". 25th October, 1983.

Class. 3. No. 153453. Tobu Enterprises Private Limited, 8/29, Kirti Nagar Industrial Area, New Delhi-110015, India. An Indian Company. "Seat for cycles". 12th September, 1983.

Class. 3. No. 153495. New Way Chemicals & Polishes Private Ltd., 6 Cathedral Road, Madras 600 086, Tamil Nadu, India, a company duly organised and existing under the laws of the Union of India. "Containers". 26th September, 1983.

Class. 3. No. 153480. Shiv Shankar Ghore Wala, 2560, Dhamar Pura, Kinari Bazar, Delhi-110006, Indian National. "Bottle". 21st September, 1983.

Class. 3. No. 153496. Health Products, 363, Kaliandas Udyog Bhavan, Century Bazar Lane, Worli, Bombay-400025, State of Maharashtra, an Indian Sole Proprietary firm. "Container". 26th September, 1983.

Class. 3. No. 153457. Genelec Limited, (an existing Company under the Companies Act) at Hindlight House, Subhash Road, Jogeshwari (East), Bombay 400 060, Maharashtra State, India. "Lighting Fitting". 13th September, 1983.

Class. 3. No. 153494. Indian Cosmetics, 35J, Raja Naba Kissen Street, Calcutta-700005, West Bengal, India, an Indian Proprietorship concern, "Container". 23rd September, 1983.

Class. 3. No. 153489. Kalpana Industries a Registered Indian Partnership Firm, carrying on Business at Gardens, Bombay 400 027, Maharashtra. "Chain". 22nd September, 1983.

Class. 3. No. 153375. Eagle Flask Private Limited (an existing Company under the Companies Act) at Eagle Estate, Talegaon 410 507, District Pune, Maharashtra State, India. "Cigarette Lighter Case". 26th August, 1983.

Class. 3. No. 153175. N. R. Dongre, Director, Usha Intercontinental (Proprietor of General Sales Private Limited) 8-Malcha Marg Market, New Delhi-110021, India. An Indian National. "Folding Table". 4th June, 1983.

Class. 3. No. 153417. Shri Nimish Bhupendrabhai Patel, Shri Girish Bhupendrabhai Patel and Smt. Jagruti Sunil Patel trading as AAKAR, of Trikam Bhuvan, 15, Laxmi Nivas Society, Paldi, Ahmedabad-380 007, India. "Executive Chair". 2nd September, 1983.

Class. 3. No. 153497. Jabsons Tradex Private Limited, a Company incorporated under the Companies Act, 1956; whose address is, 15, "Ameeta" Building (3RD FLOOR), Bhonsale Marg, Opp. Sachivalaya, Bombay-400 021; in the State of Maharashtra, within the Union of India. "Tooth Brush Cum Tongue Scrapper". 26th September, 1983.

Class. 4. No. 153378. Eagle Flask Private Limited (an existing Company under the Companies Act) at Eagle Estate, Talegaon-410 507, State of Maharashtra, India "Vacuum Flask Refill". 26th August, 1983.

Class. 4. No. 153381. Eagle Flask Private Limited (an existing Company under the Companies Act) at Eagle Estate, Talegaon-410 507, State of Maharashtra, India "Vacuum Flask Refill". 26th August, 1983.

Class. 4. No. 153383. Eagle Flask Private Limited (an existing Company under the Companies Act) at Eagle Estate, Talegaon 410 507, District Pune, Maharashtra State, India. "Vacuum Flask Refill". 26th August 1983.

Class. 4. No. 153483. Priya Foods Private Limited, Poranki, Vijayawada 521 137, Krishna District, Andhra Pradesh, India, a Company duly organised and existing under the laws of the Union of India. "Bottles". 21st September, 1983.

Class. 4. No. 153241. McDowell & Co. Ltd., a Company incorporated in India, 3 Second Line Beach, Madras-600 001, Tamil Nadu, India. "Glass Bottle". 7th July, 1983.

Class. 4. No. 153481. Shiv Shankar Gupta, trading as Shiva Shankar Ghore Wala, 2560, Dharam Pura, Khan Bazar, Delhi-110006, Indian National. "Bottle". 21st September, 1983.

Class. 4. Nos. 153146-153152. R & M Company, an Indian Proprietorship firm, of 4635 Ajmeri Gate, Delhi-110006, India. "Glass Tiles". 1st June, 1983.

Class. 12. No. 153546. Personal Products Company, of Van Lieu Avenue, Milltown, N. J. 08850, U.S.A., a Corporation organised and existing under the laws of the State of New Jersey, United States of America. "Sanitary Napkin". 10th October, 1983.

Class 12. No. 153547. Personal Products Company, of van Lieu Avenue, Milltown, N. J. 08850, U.S.A., a corporation organised and existing under the laws of the State of New Jersey, United States of America. "Sanitary Napkin" 10th October, 1983.

Class. 12. No. 153254. Union Carbide India Limited an Indian Company of 1, Middleton Street, Calcutta-700 071, West Bengal, India. "Dry Cell". 13th July, 1983.

Name Index of Applicants for Patents for the month of October, 1983 (Nos. 1210/Cal/83 to 1343/Cal/83, 311/Bom/83 to 343/Bom/83, 205/Mas/83 to 216/Mas/83 and 683/Del/83 to 728/Del/83).

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Abraham, P.—	Z13/Mas/83.
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Airbilt Limited.—	1297/Cal/83.
Air Preheater Company, Inc., The.—	1281/Cal/83.
Aluminium Pechiney.—	1265/Cal/83, 1287/Cal/83, 1295/Cal/83.
Ambac Industries Inc.—	1211/Cal/83, 1212/Cal/83.
American Cyanamid Company.—	1273/Cal/83.
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Arbed S.A.—	1322/Cal/83.
Armco Inc.—	697/Del/83, 710/Del/83, 711/Del/83, 712/Del/83.
Asea-Jumet, Societe Anonyme.—	1333/Cal/83.
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Bansal, O. J.—	324/Bom/83.
Barr & Stroud Limited.—	1285/Cal/83.
Bendix Corporation, The.—	699/Del/83, 700/Del/83.
Bendix Limited.—	685/Del/83, 686/Del/83.
Bigelow-Sanford, Inc.—	1235/Cal/83.
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Name	Appln. No.	Name	Appln. No.
—C—			
C-I-L Inc.—689/Del/83.		Jain, V. B.—330/Bom/83.	
Cabot Corporation.—1289/Cal/83.		Johnsen & Jorgensen (Plastics) Limited.—1274/Cal/83.	
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—D—		Kashipara, H. T.—323/Bom/83.	
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Dewplan (E.T.) Limited.—1277/Cal/83.		Kerb-Konus-Vertriebs-GmbH.—1342/83.	
Dorr-Oliver Incorporated.—684/Del/83.		Kiran Tobacco Products Pvt. Ltd.—329/Bom/83.	
Dunlop Limited—1262/Cal/83.		Kogie, K. S.—333/Bom/83.	
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—F—			
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Fibre Dynamics Limited.—1312/Cal/83.		—M—	
Foseco International Limited.—1268/Cal/83.		Mannesmann Aktiengesellschaft.—1299/Cal/83.	
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Glaxo Group Limited.—1243//Cal/83.		Maschinenfabrik Rieter AG.1210/Cal/83.	
Group Enterprises.—311/Bom/83, 312/Bom/83.		McKenna, J. J.—1334/Cal/83.	
Guha, S.—1292/Cal/83.		Metallgesellschaft Aktiengesellschaft.—1299/Cal/83.	
—H—			
Harford Overseas Limited.—1323/Cal/83.		Minsky Motorny Zavod.—1234/Cal/83.	
Hindustan Ciba Geigy Ltd.—331/Bom/83.		Mipak Plastics Pvt. Ltd.—326/Bom/83.; 327/Bom/83.	
Hitachi Ltd.—1214/Cal/83, 1252/Cal/83.		Mishra, A. (Sm.).—1303/Cal/83.—	
Hoechst Aktiengesellschaft.—1279/Cal/79, 1324/Cal/83.		Mishra, C. (Sm.).—1303/Cal/83.	
Huttenes-Albertus Chemische Werke GmbH.—1247/Cal/83.		Mishra, S. P.—1303/Cal/83.	
—I—			
I.A.E.C. (Bombay) Ltd.—322/Bom/83.		Mitsui Toatsu Chemicals, Inc.—1286/Cal/83, 1338/Cal/83.	
IMI Titanium Limited.—696/Del/83.		Mobil Oil Corporation.—1267/Cal/83.	
Imperial Chemical Industries Plc.—724/Del/83.		Monsanto Company.—1266/Cal/83.	
Indian Institute of Technology.—693/Del/83, 694/Del/83.		Mousson S.A.—1237/Cal/83.	
Intech Systems Corp.—1223/Cal/83.		Mukherjee, S.—1245/Cal/83.	
Interlock Industries Limited.—1280/Cal/83.		Muthusamy, P.—205/Mas/83.	
—J—			
—K—			
—L—			
—M—			
—N—			
—O—			
—P—			

Occidental Chemical Corporation.—1249/Cal/83.  
Oil and Natural Gas Commission.—692/Del/83.  
Osterrath, H. (Dipl.-Ing.)—1290/Cal/83.

Naarden International N.V.—1272/Cal/83.  
National Aeronautics and Space Administration.—1316/Cal/83.  
Nova Corporation.—334/Bom/83.

Name	Appln. No.	Name	Appln. No.
—P—			
Palnitkar, G.P.R. (Dr.)—215/Mas/83.		T.M.H. Tassiyot Mishmar Haemek Ve-Cal'ed (Tama Plastic Industries)—1311/Cal/83.	
Pandey, K. P.—1301/Cal/83, 1302/Cal/83.		Tata Engineering & Locomotive Co., Ltd.—332/Bom/83.	
Pandey, R. S.—1301/Cal/83, 1302/Cal/83.		Tea Research Foundation of Central Africa, The.—1278/Cal/83.	
Panje, K. G.—207/Mas/83.		Tesla, Koncernovy Padnik.—1343/Cal/83.	
Pannalal, N.—325/Bom/83.		Texaco Development Corporation.—1219/Cal/83.	
Parke, T. J.—1254/Cal/83.		Tokyo Musashi Manufacturing Co., Ltd.—1225/Cal/83.	
Pathak, N. (Sm.)—1303/Cal/83.		Toyo Engineering Corporation.—1338/Cal/83.	
Patil, U. S.—343/Bom/83.		Transformatoren Union Aktiengesellschaft.—1227/Cal/83.	
Permawalt Corporation.—1298/Cal/83.			
Personal Products Company.—1288/Cal/83.			
Pfizer Inc.—726/Del/83.			
Pharmindustrie.—1256/Cal/83, 1257/Cal/83, 1258/Cal/83, 1259/Cal/83.			
Pont. A. Mousson S.A.—1237/Cal/83.			
Pook, M. J.—714/Del/83, 715/Del/83.			
Pressures Cookers & Appliances Ltd.—318/Bom/83.			
Pyrene Chemical Services Ltd.—335/Bom/83.			
—R—			
R. Goodwin International Limited.—719/Del/83.		Verma, J. R. K. (Dr.)—315/Bom/83.	
R. J. Reynolds Tobacco Company.—1314/Cal/83.		Vickers Australia Limited.—1222/Cal/83.	
Radhakrishnanan, G. B.—320/Bom/83.		Vidut Engineering & Technologies Pvt. Ltd.—727/Del/83.	
Raman, M.S.I.K.—214/Mas/83.		Voest Alpine AG.—1306/Cal/83.	
Ranganathan, B.—212/Mas/83.		Vsesojuzny Nauchno-Issledovatel'sky Gorno-Metallurgichesky Institut Tsvetnykh Metallov.—1241/Cal/83.	
Rao, N. L. R.—210/Mas/83.		Vsesojuzny Nauchno-Issledovatel'sky I Proektny Institut Aluminievoi Magnievoi I Elektrodnoi Promyshlennosti.—1264/Cal/83.	
Regal International, Incorporated.—1320/Cal/83.			
Richter Gedeon Vegyeszeti Gyar RT.—1335/Cal/83, 1336/Cal/83.			
Ringfeder GmbH.—713/Del/83.			
—S—			
SKF Steel Engineering AB.—1339/Cal/83.		W & A Bates Limited.—1294/Cal/83.	
SKW Trestberg Aktiengesellschaft.—1228/Cal/83.		Walther & Cie Aktiengesellschaft.—704/Del/83.	
Schering Aktiengesellschaft.—690/Del/83.		Westinghouse Electric Corporation.—1229/Cal/83, 1230/Cal/83, 1238/Cal/83, 1239/Cal/83, 1240/Cal/83, 1319/Cal/83, 1337/Cal/83.	
Schubert & Salzer Maschinenfabrik Aktiengesellschaft.—1341/Cal/83.		West Point-Pepperell, Inc.—1269/83.	
Scopas Technology Company, Inc., The.—1250/Cal/83.		Widia (India) Limited.—209/Mas/83.	
Shah, S. M.—314/Bom/83.		Woodbury, N. H.—1277/Cal/83.	
Shah, V. J.—314/Bom/83.		Wermald Fire Systems Inc.—336/Bom/83.	
Shah, V. K. (Mrs.) & Others.—316/Bom/83.			
Sharma, J. C.—718/Del/83.		—Y—	
Shell Internationale Research Maatschappij B.V.—701/Del/83.		Yomamoto S.—1260/Cal/83.	
Siemens Aktiengesellschaft.—1275/Cal/83.		—Z—	
Societe Anonyme De Participations Appareillage Gardy.—695/Del/83.		Zellweger Uster Ltd.—1340/Cal/83.	
Societe Des Electrodes Et Refractaires "Savoie" (SERS).—1226/Cal/83.		Zimmern, B.—1270/Cal/83.	
Societe D'Etudes Scientifiques Et Industrielles De L'Ile-De-France.—1246/Cal/83.			
Solanki Sewing Equipments.—328/Bom/83.			
Sood, B.—707/Del/83, 708/Del/83.			
Stamicarbon B. V.—1242/Cal/83.			
Steelsworth Pvt., Ltd.—1220/Cal/83.			

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